

WISHA Interim Interpretive Memorandum
Washington Department of Labor and Industries
#97-2-F

BULLARD'S TYPE-CE, ABRASIVE BLASTING RESPIRATORS AND LEAD PROTECTION

Approved: Michael Wood, Senior Program Manager
WISHA Policy & Technical Services

Date Issued: February 28, 1997

Background:

As of August 30, 1995, the federal Occupational Safety and Health Administration (OSHA) allows two models of abrasive blasting respirators manufactured by the E.D. Bullard Company to be used at construction worksites where airborne concentrations of lead may reach 1000 times the PEL (50 mg/M3). Both type-CE models (model #77 and #88) are classified as loose-fitting, supplied-air respirators and are designed to operate in "continuous-flow" mode.

Table 1 of the state Lead in Construction Standard, WAC 296-155-17613, restricts use of these types of respirators to airborne concentrations of lead that are at/or below 25 times the PEL (1.2 mg/M3). In applying the federal standard, OSHA recognized a higher protection factor (PF) for these abrasive blasting respirators after an independent study using an OSHA-approved protocol demonstrated that a minimum PF rating of 40,000 was maintained (in addition to maintaining positive pressure throughout testing). However, experience has shown significantly reduced protection during actual use in cases where the respirators were not used and maintained properly.

The higher PF determination applies only to the two Bullard type-CE models (#77 and #88) and is limited to the scope of WAC 296-155-17613. This is because OSHA has indicated that this is an interim exception, pending a final determination of the proper PF and any appropriate rulemaking.

Additionally, OSHA instructs CSHOs to carefully evaluate the conditions of use in the workplaces affected by the PF exception to make sure that manufacturer's specifications (i.e., air supply hose length, hose diameter, operating pressure, etc.) are being followed, in addition to following all other requirements in the standard (i.e., inspection of components, acceptable air quality, etc.). This inspection emphasis is critical since it has been shown that these respirators have provided considerably less protection during actual use compared to simulated study results in cases where improper use and maintenance was occurring.

This interim memorandum provides comparable guidance to staff responsible for enforcing Title 49.17 RCW, the Washington Industrial Safety and Health Act (WISHA).

Policy:

1. WISHA compliance staff must not cite employers who are covered by the scope of WAC 296-155-17613 when Bullard abrasive blasting respirators, Model 77 (TC-19C-293) and Model 88 (TC-19C-293), are being used to protect employees from airborne lead concentrations up to, and not exceeding, 50 mg/M3 (1000 times the PEL).
2. CSHOs who evaluate activities using the Bullard respirators noted above must determine that use is consistent with the manufacturer's specifications and the requirements of both WAC 296-155-17613 and WAC 296-62-071.